

# Notice of Allowability

Application No.

09/359,599

Applicant(s)

HOGG, TAD

Examiner

Fred Ferris

Art Unit

2128

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7 September 2004.
2. ☒ The allowed claim(s) is/are 1-8, 10-17 and 19-26.
3. ☒ The drawings filed on 14 August 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)           |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|   | 9. <input type="checkbox"/> Other _____   |

EXAMINER  
HOMERE

### **DETAILED ACTION**

1. *This Office Action is in response to applicant's amendment filed on 7 September 2004. Claims 1-8, 10-17, and 19-26 are currently pending in this application. Claims 1-8, 10-17, and 19-26 have now been allowed over the prior art of record.*

### **Response to Arguments**

2. *Applicant's arguments filed 7 September 2004 have been fully considered and found to be persuasive.*

*Regarding applicant's response to 35 USC 103(a) rejection: The examiner withdraws the 35 USC 103(a) rejection in view of applicant's arguments filed on 7 September 2004 and the amendment to the claims filed on 9 February 2004.*

### **Allowable Subject Matter**

3. *Claims 1-8, 10-17, and 19-26 have now been allowed over the prior art of record.*

#### **The following is an examiner's statement of reasons for allowance:**

*Per independent claims 1, 10, and 19: Independent claims 1, 10, and 19 include limitations relating to a method, system, and computer code for computing a diversity measure ( $H(m)$ , level of diversity) of a group of web pages modeled as a combinatorial structure and identifying all  $M$  possible substructures having  $m$  elements from among  $n$  elements and using the frequency of each distinct substructure to compute an entropy corresponding to  $m$ .*

*While these features are individually disclosed in the prior art, the prior art of record does not meet the conditions as suggested in MPEP section 2132, namely:*

*"The identical invention must be shown in as complete detail as is contained in the ... claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an **ipsissimis verbis** test, i.e., identity of terminology is not required. **In re Bond**, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990)."*

*In particular, the prior art of record does not disclose features pertaining to the specific sequence of steps relating to identifying M substructures having elements among elements among the group of web pages, determining a number of M similar substructures, and computing entropy based upon all numbers of M (see independent claims 1, 10, and 19, specification page 7, line 5-31, Figs. 2-4, 9-11), in the context of the claims.*

*The closest prior art uncovered during examination discloses the following elements:*

U.S. Patent 6,564,197 issued to Sahami et al: teaches **hierarchical structures**, identifying **sets** and related subsets (substructures), groups of elements among **nodes**, decision **trees**, and determining an **entropy based influence**.

U.S. Patent 5,895,470 issued to Pirolli et al: teaches **sets of substructures** (groups), hierarchical structures, comparing (determining) groups with **similar groups**, and web page frequency functions.

While the prior art of record discloses various elements of combinatorial structures, substructures, entropy based influence, and web page frequency functions, none disclose the specific sequence of steps of identifying *M* substructures having elements among the group of web pages, determining a number of *M* similar substructures, and computing entropy based upon all numbers of *M* as now specifically recited in independent claims 1, 10, and 19. This feature renders the claimed invention non-obvious over the prior art of record. Claims 2-8, 11-19, and 20-26 are allowable as being dependent from independent claims 1, 10, and 19 respectively.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

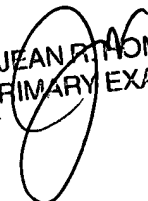
### **Conclusion**

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Ferris whose telephone number is 571-272-3778

Art Unit: 2128

and whose normal working hours are 8:30am to 5:00pm Monday to Friday. Any inquiry of a general nature relating to the status of this application should be directed to the group receptionist whose telephone number is 571-272-3700. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jean Homere can be reached at 571-272-3780. The Official Fax Number is: (703) 872-9306.

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November 3, 2004

  
JEAN P. HOMERE  
PRIMARY EXAMINER